

Resource Summary Report

Generated by [nidm-terms](#) on Jul 30, 2026

BKS.Cg-Dock7^m +/+ Lepr/J

RRID:IMSR_JAX:000642

Type: Organism

Proper Citation

RRID:IMSR_JAX:000642

Organism Information

URL: <https://www.jax.org/strain/000642>

Proper Citation: RRID:IMSR_JAX:000642

Description: Mus musculus with name BKS.Cg-Dock7^m +/+ Lepr/J from IMSR.

Species: Mus musculus

Synonyms: BKS db. C57BLKS-m Lepr. BKS.Cg-m+/+Lepr/J. BKS.Cg-m +/+ Lepr/J

Notes: gene symbol note: dedicator of cytokinesis 7|leptin receptor; mutant strain|congenic strain: Dock7|Lepr

Affected Gene: dedicator of cytokinesis 7|leptin receptor

Genomic Alteration: misty|diabetes

Catalog Number: JAX:000642

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: BKS.Cg-Dock7^m +/+ Lepr/J

Record Creation Time: 20250513T053620+0000

Record Last Update: 20260725T044328+0000

Ratings and Alerts

No rating or validation information has been found for BKS.Cg-Dock7^m +/+ Lepr/J.

No alerts have been found for BKS.Cg-Dock7^m +/- Lepr/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 98 mentions in open access literature.

Listed below are recent publications. The full list is available at [nidm-terms](#) .

Basu P, et al. (2025) Long-lasting and fast methylglyoxal-scavenging peptide CycK(Myrr)R4E alleviates chronic pain in type 2 diabetic mice. *Pain reports*, 10(5), e1312.

Pérez-Martínez D, et al. (2025) Sex-specific metabolic effects of Treg expansion in db/db mice. *Frontiers in immunology*, 16, 1599985.

Li Calzi S, et al. (2025) Targeting Diabetic Retinopathy with Human iPSC-Derived Vascular Reparative Cells in a Type 2 Diabetes Model. *Cells*, 14(17).

Lee JJ, et al. (2025) Local arterial administration of acidified malonate as an adjunct therapy to mechanical thrombectomy in ischemic stroke. *Cardiovascular research*, 121(9), 1407.

Mahameed M, et al. (2025) Nitroglycerin-responsive gene switch for the on-demand production of therapeutic proteins. *Nature biomedical engineering*, 9(7), 1129.

Thieulent CJ, et al. (2025) Diabetes exacerbates SARS-CoV-2 replication through ineffective pulmonary interferon responses, delayed cell-mediated immunity, and disruption of leptin signaling. *Frontiers in cellular and infection microbiology*, 15, 1513687.

Yan S, et al. (2025) Sodium-glucose cotransporter 2 inhibitors alleviate renal fibrosis in diabetic kidney disease by inhibiting Hmgcs2 and Btg2 in proximal tubular cells. *Journal of translational medicine*, 23(1), 959.

Miro C, et al. (2025) Leptin enhances the intracellular thyroid hormone activation in skeletal muscle to boost energy balance. *Cell metabolism*, 37(4), 936.

Sue N, et al. (2025) ER stress disrupts insulin release in murine models of type 2 diabetes by impairing retromer action and constitutive secretion. *Cell reports*, 44(5), 115691.

Ho QWC, et al. (2025) I-BET151 modulates glucokinase gene expression and beta cell function in part through changes in FOXO1 expression. *Diabetologia*.

Wang S, et al. (2024) Accelerating diabetic wound healing by ROS-scavenging lipid nanoparticle-mRNA formulation. *Proceedings of the National Academy of Sciences of the United States of America*, 121(22), e2322935121.

Llorián-Salvador M, et al. (2024) Regulatory T cell expansion prevents retinal degeneration in type 2 diabetes. *Journal of neuroinflammation*, 21(1), 328.

Yu H, et al. (2024) Effects of *Abelmoschus manihot* (L.) and its combination with irbesartan in the treatment of diabetic nephropathy via the gut-kidney axis. *Frontiers in pharmacology*, 15, 1424968.

Liang Q, et al. (2024) Comprehensive bioinformatics analysis identifies metabolic and immune-related diagnostic biomarkers shared between diabetes and COPD using multi-omics and machine learning. *Frontiers in endocrinology*, 15, 1475958.

Tan CAZ, et al. (2024) Purine and carbohydrate availability drive *Enterococcus faecalis* fitness during wound and urinary tract infections. *mBio*, 15(1), e0238423.

Hui Y, et al. (2024) High glucose impairs cognitive function through inducing mitochondrial calcium overload in Treg cells. *iScience*, 27(1), 108689.

Yang S, et al. (2024) Advanced glycation end products promote meniscal calcification by activating the mTOR-ATF4 positive feedback loop. *Experimental & molecular medicine*, 56(3), 630.

Yu V, et al. (2024) Differential CpG methylation at *Nnat* in the early establishment of beta cell heterogeneity. *Diabetologia*, 67(6), 1079.

Sciarretta F, et al. (2024) Lipid-associated macrophages reshape BAT cell identity in obesity. *Cell reports*, 43(7), 114447.

Schaub JA, et al. (2023) SGLT2 inhibitors mitigate kidney tubular metabolic and mTORC1 perturbations in youth-onset type 2 diabetes. *The Journal of clinical investigation*, 133(5).